ICT-ENABLED AGRICULTURAL EXTENSION: HOW TO PROMOTE AND SUSTAIN?

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Executive Summary

Governments in developing countries have been investing and working towards digitalizing various citizen services to obtain significant economic and societal benefits. In order to build "Digital Bangladesh," the Office of the Prime Minister of the Bangladesh Government and other donor agencies jointly initiated several ICT-based projects in different sectors prioritizing agriculture, local government, education. However, both academic and practice literature documented that the success rate of ICT-led development projects has been less than satisfactory. Therefore, this study investigated a way to promote and sustain ICTenabled initiatives, particularly in the context of Bangladesh agriculture. This study adopted a qualitative research methodology, interviewed eleven (11) top-ranked professionals from ten (10) organizations involved in carrying out several ICT-based projects in agriculture. All respondents were mainly asked to identify (i) "important areas where ICT-based applications can potentially be useful for modernizing agricultural extension service" and (ii) "measurable indicators for designing and evaluating the success of such ICT-based initiatives." Responses were analyzed qualitatively using 'Thematic Analysis' where first 'codes' (key meaning of a text or 'latent content') were generated inductively then were grouped based on their similarities in order to form "themes." Our thematic analysis revealed a total of forty codes and nine thematic areas potentially useful for initiating ICT-based projects for modernizing agriculture. These areas were agricultural knowledge hub, ICTbased extension service, farmers database, capacity building programs, Decision Support System (DSS), farming alert system, agricultural market information system, ICT-based community support, and ICT strategies for agriculture. It further proposed five (5) sets of measuring indicators (e.g., economic, quality of life, community development, service quality, technology acceptance) that would be useful in designing and measuring the success of any ICT interventions.

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